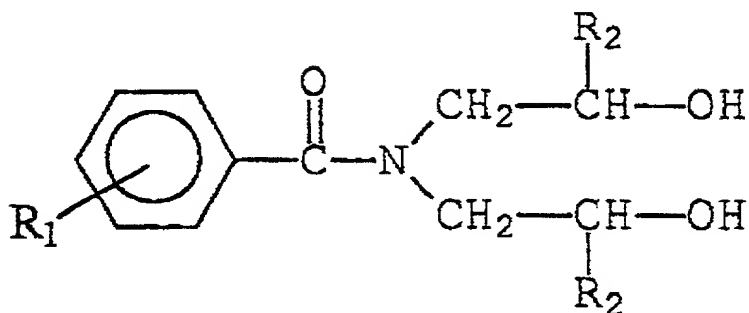


EMS-Chemie AG

Primid II

## Claims

1.  $\beta$ -hydroxyalkylamide having the general Formula I:

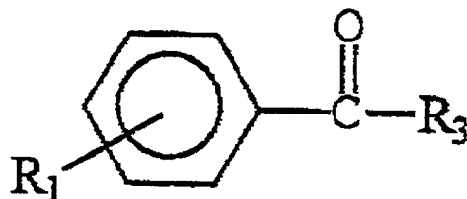


I

where  $\text{R}_1$  is H or a linear or branched  $\text{C}_1$  to  $\text{C}_{10}$  alkyl and  $\text{R}_2$  is a linear or branched  $\text{C}_1$  to  $\text{C}_5$  alkyl.

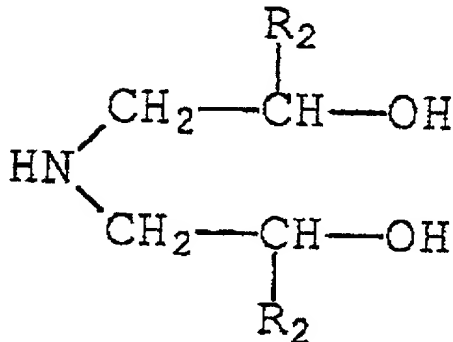
2.  $\beta$ -hydroxyalkylamide as claimed in Claim 1, characterized by the fact that  $\text{R}_1$  is H, t-butyl, i-propyl or pentyl and is located in the para position to the CO group.
3.  $\beta$ -hydroxyalkylamide as claimed in Claim 2, characterized by the fact that  $\text{R}_1$  is H and  $\text{R}_2$  is  $\text{CH}_3$ .

4. Process for the production of  $\beta$ -hydroxyalkylamides as claimed in at least one of the Claims 1 to 3, characterized by the fact that a carboxylic acid derivative having the general Formula II:



II

where  $R_3$  is halogen or  $OR_4$ , whereby  $R_4$  stands for a linear  $C_1$  to  $C_5$  alkyl, is reacted with an alkanol amine having the general Formula III:



III

and where  $R_1$  and  $R_2$  are defined as indicated above.

5. Process as claimed in Claim 4, characterized by the fact that a carboxylic acid derivative having the general Formula II where  $R_3$  is a halogen is reacted at -10 to 25 °C with the alkanol amine having the general Formula III.
6. Process as claimed in Claim 5, characterized by the fact that benzoyl chloride is used as the carboxylic acid derivative and diisopropanol amine as the alkanol amine.
7. Process as claimed in Claim 4, characterized by the fact that a carboxylic acid derivative having the general Formula II with  $R_3-OR_4$ , where  $R_2$  is as defined above, is reacted at 25 to 150°C with an alkanol amine having the general Formula III.
8. Process as claimed in at least one of the Claims 4 to 7, characterized by the fact that the carboxylic acid derivative having the general Formula II and the alkanol amine having the general Formula III are reacted in a solvent with vigorous agitation or stirring.
9. Process as claimed in at least one of the Claims 4 to 8, characterized by the fact that aromatic hydrocarbons such as benzene, toluene or xylene and/or ether are used as the solvent.

10. Process as claimed in at least one of the Claims 4 to 9, characterized by the fact that the alkanol amine is presented first and the carboxylic acid derivative is added with vigorous agitation or stirring.
11. Use of the  $\beta$ -hydroxyalkylamide as claimed in one of the Claims 1 to 3 as a cross linker for polymers.
12. Use of the  $\beta$ -hydroxyalkylamide as claimed in one of the Claims 1 to 3 as a cross linker for powder coats.
13. Use as claimed in Claim 10, characterized by the fact that it is used as a cross linker for polyester powder coats.
14. Use as claimed in Claim 11, characterized by the fact that a mixture of  $\beta$ -hydroxyalkylamide and another cross linker selected from the  $\beta$ -hydroxyalkylamides and/or epoxies is used as the cross linker.